

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A hinge assembly for the connection of a vertically opening panel to an element between a closing position and an opening position, comprising:
 - a supporting base;
 - a lifting lever operatively connected to the panel and directly hinged to the supporting base about a first pivoting axis between said closing and opening positions of the panel;
 - a balancing device hinged to the supporting base about a second pivoting axis and acting on the lifting lever along a direction of thrust defined by a line joining the second pivoting axis and a point of application of the thrust on the lifting lever to at least partially counterbalance the weight of the panel during rotation of the lever about said first pivoting axis;
 - wherein the second pivoting axis defines with the first pivoting axis a dead center plane;
 - wherein the first pivoting axis and said balancing device (10) are positioned above an upper surface of the element in the mounting position of the hinge assembly;
 - wherein in said closing position of the panel the second pivoting axis is interposed between the panel and the first pivoting axis;
 - wherein the direction of thrust of the balancing device during operation is never below said dead center plane; and

wherein said balancing device comprises an adjustment device for adjusting the thrusting force exerted by the balancing device on the lifting lever.

2. (previously presented) The hinge assembly according to claim 1, wherein said balancing device and said lifting lever are mounted above said supporting base.

3. (previously presented) The hinge assembly according to claim 1, wherein said lifting lever is operatively connected to the panel by means of at least one fastening element associated to the lifting lever by means of a connecting arm.

4. (previously presented) The hinge assembly according to claim 3, wherein said at least one fastening element is constituted by a portion of the connecting arm distal with respect to the lifting lever.

5. (previously presented) The hinge assembly according to claim 3, wherein the lifting lever is provided with hooking means adapted to cooperate with a portion of the connecting arm proximal to the lever.

6. (Withdrawn) Hinge assembly according to claim 3, wherein the connecting arm is integrally formed with the lifting lever.

7. (previously presented) The hinge assembly according to claim 4, wherein said at least one fastening element is constituted by a substantially plate-shaped element adapted to be laterally associated to the panel at an upper end thereof.

8. (previously presented) The hinge assembly according to claim 1, wherein the balancing device comprises a spring group adapted to exert a thrusting action on the lifting lever to at least partially counterbalance the weight of the panel during rotation of the lifting lever about said first pivoting axis.

9. (previously presented) The hinge assembly according to claim 8, wherein said spring group comprises at least one spring received in a hollow supporting body.

10. (previously presented) The hinge assembly according to claim 9, wherein said hollow body is hinged to the supporting base at an end of the hollow body distal with respect to the lifting lever.

11. (previously presented) The hinge assembly according to claim 10, wherein said hollow body is hinged to at least one supporting wall extending laterally to the supporting base.

12. (previously presented) The hinge assembly according to claim 11, wherein said supporting wall integrally extends from the supporting base.

13. (canceled)

14. (previously presented) The hinge assembly according to claim 1 or 8, wherein said adjustment device comprises a cap for closing the distal end of the hollow body, said cap being adjustably positionable along the axial direction and being adapted to cooperate in abutment relationship with a free end of at least one spring of said spring group.

15. (previously presented) The hinge assembly according to claim 14, further comprising at least one abutment element adapted to limit the extraction of the closing cap from the distal end of the hollow body housing said at least one spring.

16. (previously presented) The hinge assembly according to claim 15, wherein said at least one abutment element integrally extends from the supporting base.

17. (Withdrawn) Hinge assembly according to claim 15, wherein said at least one abutment element is constituted by an adjustment screw rotatably mounted in the lifting lever and cooperating in abutment relationship with the closing cap of the hollow body.

18. (previously presented) The hinge assembly according to claim 1, wherein said balancing device is at least temporarily housed in a respective housing space defined within the lifting lever during rotation of the lifting lever about said first pivoting axis.

19. (previously presented) The hinge assembly according to claim 18, wherein a spring group is slidably mounted in said housing space defined within the lifting lever.

20. (Withdrawn) Hinge assembly according to claim 19, wherein the hollow supporting body of the spring group is provided with a roller rotatably mounted at an end of the hollow body proximal to the pivoting axis of the lifting lever.

21. (Withdrawn) Hinge assembly according to claim 20, wherein said roller is urged by said at least one coil spring towards a cam element shaped so that the thrust exerted by the balancing device on the lifting lever is capable to at least partially counterbalance the weight of the panel during rotation of the lever about said pivoting axis.

22. (Withdrawn) Hinge assembly according to claim 21, wherein said cam element is mounted on said supporting base close to the pivoting axis of the lifting lever.

23. (previously presented) The hinge assembly according to claim 9, wherein said spring group comprises at least one pushing element slidably mounted in said hollow supporting body and urged by said at least one spring towards the lifting lever.

24. (previously presented) The hinge assembly according to claim 9 or 23, wherein said spring group comprises at least one spring-guiding stem extending from a closing cap of the hollow body or from said pushing element.

25. (previously presented) The hinge assembly according to claim 1, further comprising an angular adjustment device for adjusting the angular position of the direction of thrust exerted by the balancing device on the lifting lever with respect to said dead centre plane passing through the second pivoting axis and through the first pivoting axis.

26. (previously presented) The hinge assembly according to claim 25, wherein said angular adjustment device comprises a supporting body hinged to the supporting base about the first pivoting axis and operatively arranged between said lever and the balancing device.

27. (previously presented) The hinge assembly according to claim 26, wherein the supporting body of the angular adjustment device is angularly displaceable with respect to the lifting lever.

28. (previously presented) The hinge assembly according to claim 26 or 27, wherein the angular adjustment device comprises adjustment means for regulating in an adjustable manner the angular position of said supporting body with respect to the lifting lever.

29. (previously presented) The hinge assembly according to claim 26 or 27, further comprising abutment means for limiting the angular displacement of the angular adjustment device with respect to the lifting lever.

30. (previously presented) The hinge assembly according to claim 26, wherein the balancing device acts upon a pin transversely mounted in said angular adjustment device.

31. (previously presented) The hinge assembly according to claim 30, wherein said pin is slidably mounted along the longitudinal direction in an end of a hollow body of the balancing device proximal to the lifting lever during rotation of the lifting lever about the first pivoting axis.

32. (previously presented) The hinge assembly according to claim 31, wherein the hollow body of the balancing device is provided with means for guiding the axial sliding of said transversal pin.

33. (previously presented) The hinge assembly according to claim 1 or 25, wherein the direction of thrust exerted by the balancing device forms an angle of from about 0° to about 30° with respect to said dead centre plane.

34. (previously presented) The hinge assembly according to claim 25, wherein said angular adjustment device is housed in a respective housing space defined within the lifting lever.

35. (Withdrawn) Hinge assembly according to claim 1, wherein said balancing device comprises a motor group acting on the lifting lever to at least partially counterbalance the weight of the panel during rotation of the lever about said pivoting axis.

36. (previously presented) The hinge assembly according to claim 1, further comprising friction means to adjust the value of the lifting torque exerted by the lifting lever to at least partially counterbalance the weight of the panel.

37. (previously presented) An element comprising a panel articulated to the furniture element by means of at least one hinge assembly according to claim 1.

38. (previously presented) The element according to claim 37, wherein said at least one hinge assembly is mounted above an upper surface of said element.

39. (previously presented) The element according to claim 37, wherein the hinge assembly comprises a lifting lever operatively associated to the panel by means of at least one fastening element associated to the panel at an upper end thereof.

40. (previously presented) The element according to claim 39, wherein the fastening element is constituted by a substantially plate-shaped element received in a respective housing seat laterally formed in the panel.

41. (previously presented) The hinge assembly according to claim 8, wherein said spring group is slidably mounted in a housing space defined within the lifting lever.